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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/431,931	11/01/1999	PAUL DAVID TATARKA	D-20196-1	9419

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DENNIS M. MCWILLIAMS LEE, SMITH, MCWILLIAMS, SWEENEY & OHLSON P.O. BOX 2786 CHICAGO, IL 60690-2786 EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 03/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

		1-11-13			
	Application No.	Applicant(s)			
Office Action Summany	09/431,931	TATARKA ET AL.			
Office Action Summary	Examiner	Art Unit			
The MAN INC DATE of this communication and	Monique R Jackson	1773			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1)⊠ Responsive to communication(s) filed on <u>08 J</u>	anuary 2002				
<u> </u>	is action is non-final.				
3)☐ Since this application is in condition for allowa		rosecution as to the merits is			
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4) Claim(s) 1-111 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-111</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers					
9) The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			

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DETAILED ACTION

- 1. The amendment filed 1/8/02 has been entered. Claims 1-111 are pending in the application.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. The objections and rejections under 35 U.S.C. 112, 2nd paragraph, as recited in paragraphs 1-10 of the prior office action have been withdrawn in view of the amendments/reply filed 1/8/02.

Claim Rejections

- 4. Claims 93-100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 93, the phrase "preferably" at lines 14 and 15 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
- Claims 71-84 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilhoit et al (USPN 5,928,740.) The teachings of Wilhoit et al are discussed in detail in the prior office action. Wilhoit et al teach a polymer blend and mono- and multilayer films made therefrom having improved properties such as heat sealing or puncture resistance particularly useful in making heat shrinkable, oriented films for packaging food and non-food articles, wherein the blend has a first polymer comprising a copolymer of ethylene and at least one C_3 - C_{10} α -olefin having a polymer melting point between 55 and 75°C (the first polymer of the instant invention); a second polymer comprising a copolymer of ethylene and at least one C_3 - C_{10} α -olefin having a

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polymer melting point between 85 and 110°C; a third thermoplastic polymer, preferably a copolymer of ethylene and at least one C_3 - C_{10} α -olefin, having a melting point between 115 and 130°C (the second polymer of the instant invention); and preferred a fourth polymer having a melting point between 80-105°C such as copolymers of ethylene and unsaturated esters like ethylene vinyl acetate and ethylene alkyl acrylates (the third polymer of the instant invention; Abstract; Col. 1, lines 5-10, Col. 7, lines 24-40; Col. 8, line 62 - Col. 9, line 17.) Wilhoit et al teach that it is to be understood that the use of the term "copolymer of ethylene" means that the copolymer is predominantly comprised of ethylene with that at least 50% by weight of the copolymer derived from ethylene monomer units in forming the copolymer with suitable α olefins including C_3 to C_{10} α -olefins such as propene, butene-1, pentene-1, hexene-1, methylpentene-1, octene-1, decene-1 and combinations thereof such that the invention contemplates use not only of bipolymers, but copolymers of multiple monomers such as terpolymers (encompassing interpolymers) e.g. ethylene-butene-1-hexene-1 terpolymer (hence the first, second and third polymers of Wilhoit et al may comprise ethylene interpolymers as instantly claimed in Claims 75-76; Col. 6. lines 56-67.) Wilhoit et al teaches that the blend preferably comprises at least 10wt% of the first ethylene polymer, preferably 20-35wt% of the total polymer content of the four component blend, with use of lesser amounts reducing the shrinkability and higher amounts making orientation more difficult and possibly increasing extractable moieties to amounts which are undesirable for certain applications; at least 10wt% of the second ethylene polymer, preferably from about 30 to 70wt% of the total polymer weight of the polymer blend, preferably 25 to 60wt% in the preferred four component blend; at least 10wt% of the third ethylene polymer, preferably about 10 to 30wt% of the total polymer content

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of the four component blend; and about 10 to 30wt% of the fourth ethylene vinyl ester or alkyl acrylate copolymer of the total weight of the polymer blend (hence when computing the weight percentages based on the weight of only the first, third and fourth polymers of Wilhoit et al, the weight percentages fall within the instantly claimed ranges for the first, second, and third polymers, respectively, of the instant invention; Col. 7, lines 46-58; Col. 8, lines 14-26 and lines 49-61; Col. 9, lines 23-26.) Therefore, the invention taught by Wilhoit et al anticipates the polymer blend of instant claims 77-83.

Claims 86, 87, 89 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over 6. Wilhoit et al. The teachings of Wilhoit et al are discussed above. Wilhoit et al further teach that the polymer blend can be utilized to form an inner layer of a multilayer tubular film wherein in a preferred process for making an oriented or heat shrinkable film, a primary tube comprising the polymer blend is extruded and after leaving the die is inflated by admission of air, cooled, collapsed, and then preferably oriented by reinflating to form a secondary bubble with reheating to the film's orientation or draw temperature range with suitable machine direction and transverse direction stretch ratios from about 3:1 to about 5:1 with a ratio of about 4:1 preferred (Col. 11, lines 16-36.) Wilhoit et al teach that the films may be monolayer or multilayer films preferably of 10 mils or less (Col. 11, lines 37-38.) Wilhoit et al teach that the drawing point or orientation temperature is below the melting point of each layer to be oriented and above the layer's Vicat softening point with examples utilizing a draw point temperature between about 71-79°C and further teach that draw point temperature, bubble cooling rates and orientation ratios are generally adjusted to maximize bubble stability with use of higher throughput rates and lower draw point temperatures believed to provide films having higher puncture resistance relative to

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use of lower throughputs or higher orientation temperatures (Col. 14, lines 33-43.) Hence, though Wilhoit et al teach an example draw point within the instantly claimed temperature ranges, Wilhoit et al does not specifically limit the invention to a draw point temperature of from 65° to 88°C or 68° to 79°C as instantly claimed. However, based on the teachings of Wilhoit et al it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize routine experimentation to determine the optimum draw point temperature for a particular film composition and the desired puncture resistance of the resulting film.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-111 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-108 of copending Application No. 09/401692 in view of Wilhoit et al (USPN 5,928,740.) Though the claims of the two applications are not identical, they are not patentably distinct in view of Wilhoit et al. Both applications claim a polymer blend and films formed therefrom which are similar and/or overlap in layer structure and film properties with the exception that the blend of the instant application comprises a first polymer comprising at least one copolymer of ethylene and octene-1 having a

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melting point of from 55 to 95°C while Application No. 09/401692 claims a first polymer comprising at least one copolymer of ethylene and hexene-1 having a melting point of 80 to 98°C. However, Wilhoit et al teach similar polymer blends and mono- and multilayer films made therefrom having improved properties such as heat sealing or puncture resistance particularly useful in making heat shrinkable, oriented films for packaging food and non-food articles, similar to the instant invention, wherein the blend comprises various copolymers of ethylene having different melting points and wherein Wilhoit et al teach that the term "copolymer of ethylene" means that the copolymer is predominantly comprised of ethylene with that at least 50% by weight of the copolymer derived from ethylene monomer units in forming the copolymer with suitable α -olefins including C_3 to C_{10} α -olefins such as propene, butene-1, pentene-1, hexene-1, methylpentene-1, octene-1, decene-1 and combinations thereof such that the invention contemplates use not only of bipolymers, but copolymers of multiple monomers such as terpolymers. Hence, given that portions of the melting point ranges of the ethylene copolymers comprising both first polymers of the two applications are the same, and given that Wilhoit et al teach that octene-1, hexene-1, and combinations thereof, are functional equivalents in terms of ethylene copolymers utilized in polymer blends useful for producing oriented, heat shrinkable films, it would have been obvious to one having ordinary skill in the art to utilize either octene-1 or hexene-1, or a combinations thereof, in producing the first ethylene copolymers of the two co-pending applications. Further, Wilhoit et al specifically teach that the weight percentage of the various ethylene copolymers, the difference in their melting points, and the film processing conditions are result-effective variables affecting the properties of the resulting film including puncture resistance and heat-sealability, and hence, it would have been

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obvious to one having ordinary skill in the art to utilize routine experimentation to determine the optimum weight percentages and melting point ranges of the various ethylene polymers in the polymer blends, and the optimum processing conditions of the co-pending applications to provide the desired film properties for a particular end use.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

9. Applicant's arguments filed 1/8/02 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

mrj

March 7, 2002